



Rail Centres Klaipėda

The network around Lithuania's only major port is in the midst of significant changes with the reorientation of freight traffic away from Russia and the electrification of the main line from the capital Vilnius. **Jonathan Bray** explores the railways along Lithuania's Baltic coast.

Photos by the author

Klaipėda is Lithuania's only major port and in recent times has been the point of origin of most of the country's rail freight traffic. The town has also played a wider historic role in the region as the most northerly ice-free Baltic port. After years of steady growth in port traffic Russia's invasion of Ukraine has led to a loss of transit traffic from Russia and Belarus and a reorientation of freight flows towards the west.

The port of Klaipėda sits in a sheltered, ice free location where the Curonian lagoon

meets the Baltic Sea. A short ferry crossing from Klaipėda takes you to the Curonian spit and beyond it the Curonian Lagoon shelters. A UNESCO World Heritage Site, this narrow strip of sand and forest has the highest drifting sand dunes in Europe and extends for nearly 100 km, with the border with the Russian exclave of Kaliningrad half way along.

Lithuania's third largest and oldest city has a complicated and fascinating history. Founded in 1252 when the Livonian Order built Memelburg castle, later Memel (as Klaipėda was then known) it became a Prussian city and, as the

strongest fortress in Prussia, the temporary capital during the Napoleonic Wars. Its role as a point of export of the raw materials of the region (timber in particular) led to strong links with Britain, given Britain's growing Navy and economy. Indeed, to some extent, Klaipėda is built on British land given that many ships returned to Klaipėda from Britain empty, other than for ballast of sand and gravel, which was dumped on return. This enabled Memel old town to expand on a 2 m layer of British landfill. This is one reason why one of the nicknames of Klaipėda was "Little Britain" – alongside the many British (particularly Scottish) merchants who set up shop there and whose customs and habits were adopted more widely.

Later, as Prussia was folded into Germany, Memel became part of the most easterly and northerly region of Germany before a tumultuous 20th Century led (among other things) to it being seized by Lithuania. During World War II the city was devastated and nearly entirely abandoned, before becoming part of the Soviet Socialist Republic of Lithuania and, from 11 March 1990, part of the independent Republic of Lithuania.

The complex history of the region had a strong influence on the development of its railways. The direct route to Lithuania's second city Kaunas, (which as a consequence also gave more direct access to the capital Vilnius) was only completed in 1932. This followed on from the Lithuanian takeover of Klaipėda in 1923. Prior to this, Klaipėda's rail links were orientated along a coastal axis, reflecting the priorities of German Prussia, and from 1875 with a line west towards Kaliningrad (then Königsberg, the easternmost large city in Germany until World War II).

Above: On 28 July 2017 a pair of LTG Class ER 20 Co-Co diesel-electrics on a mixed freight head for Klaipėda station as heavy shunter ChME3M 6340 trips a mixed formation in the opposite direction.

Below: On 27 July 2017 TEM TMH 20 idles at Rimkai yard on the southern outskirts of Klaipėda.



Map courtesy European Railway Atlas: www.europeanrailwayatlas.com





Above: ER20 044's long mixed freight is still descending the modest incline on the station approaches as the loco passes through the platforms of Klaipėda station on 18 June 2023.

Below: Squealing and banging round the sharp curve, a trainload of now sanctioned Belarusian fertiliser will shortly arrive at the Port of Klaipėda's bulk cargo terminal on the 20 July 2017 behind ChME3M 6339.



In common with many other parts of the Baltic states Klaipėda was also served by narrow gauge lines. In Klaipėda these made only modest incursions into its rural hinterland, albeit with the novelty of sharing sections of track with a tramway in the city. Like the trams, the narrow gauge is long gone, however the attractive 1905 station buildings near Klaipėda's current broad gauge station have survived in good order and are now a restaurant.

The port of Klaipėda

As Lithuania's only major port Klaipėda is the country's window to the world. Stretching along the waterfront the port covers around 558 hectares with 24.7 km of port berths. Within the port there are a wide range of facilities including a bulk cargo terminal capable of unloading 700 wagons every 24 hours, a Ro-Ro terminal, a container terminal, an oil terminal and a cruise terminal. This makes the port a significant player in the wider Lithuanian economy supporting 58 000 jobs and generating 6.13% of Lithuania's GDP.

Until the war in Ukraine port traffic had been on an impressive upward trajectory but between 2020 and 2022 tonnage through the port fell by 25%. However, the downturn in traditional heavy freight flows to Russia, and particularly fertiliser traffic from Belarus, has been cushioned by rapid growth in container traffic, an increase in Ro-Ro traffic and growth in LNG and petroleum products, all within the context of a wider shift towards freight movements to the west.

The port has plans to expand further with a new development able to accommodate larger Baltimax vessels. The success of the port has also been a springboard for Klaipėda's wider economy – some of the products of which also use the city's extensive rail freight facilities.

Freight traffic

The Russian invasion of Ukraine has had a very significant impact on rail freight in Lithuania. Prior to the war most freight carried by LTG Cargo (a subsidiary of the state-owned railway

Below: A panorama of Klaipėda station and its yards (one of many in the area) on 16 June 2023. The station building, with its distinctive tower, can be seen on the right with a 3-car Class 730ML DMU waiting to depart for Vilnius.

undertaking Lietuvos Geležinkeliai, which is usually abbreviated to LTG) was transiting the country, mainly heading to and from the port of Klaipėda. It was also dominated by bulk freight – oil and associated products, fertilisers, chemicals and minerals. Sanctions on Russia and Belarus, the severing of direct services to Ukraine via Belarus, and quotas and restrictions on rail freight to Kaliningrad led to a dramatic contraction of LTG Cargo's business. Rail's market share of freight carried in Lithuania plunged from 34% in 2020 to 24% in 2022, while freight tonne-km carried by LTG Cargo almost halved from 14.6 billion tonne-km in 2021 to 7.4 billion tonne-km in 2022. The sanctions on the movement of fertiliser traffic from Belarus to Klaipėda port were a major factor in the wider 78% fall in chemical and fertiliser traffic carried by LTG Cargo.

LTG Cargo freight flows are still mostly made up of international and traditional bulk freight but the company is seeking to reorientate its operations both to the west (as well as accessing Ukraine via EU countries) and to further develop its container operations, which have been growing. LTG Cargo has subsidiaries in both Poland and Ukraine, which support this strategy.

One complicating factor for this new direction is that most the Lithuanian network is Russian (1520 mm) gauge. This has led to a focus on Kaunas, with its standard gauge rail link to Poland, as a railhead and transshipment point for rail traffic to the EU. It has also led to innovations. Poland's need to urgently scale back the use of Russian coal has generated new traffic for LTG Cargo. Coal imported to Klaipėda by sea and is loaded into containers carried on the broad gauge LTG network and then transferred to standard-gauge wagons at Kaunas or Šeštokai for onward transport to Poland.

LTG Cargo relies on its 44-strong fleet of Siemens ER20 CF *Eurorunner* Co-Co diesel-electric locos, which were built in 2007–09. With 2000 kW at their disposal, in multiple they are capable of moving trains of 6000 tonnes. With their clean, powerful and sleek lines the ER20s show that industrial design is alive and well and they make for an impressive sight as they head up very long, banging and clanking rakes of the limited variety of the standard design wagon types common in this part of the world. Delivered in a red livery the locos are now being repainted into LTG Cargo's new yellow livery.

Trip workings in the area are usually in the hands of extensively-rebuilt earlier Soviet heavy shunter designs, either TEM-TMHs or CME3Ms. Although these locos look both modern and similar, appearances can be deceptive. The TEM-TMH is based on the frames and bogies of the TEM18, which was the ultimate development of the TEM standard Soviet shunter. This in turn was ultimately derived from a 1940s ALCO shunter which found its way to the Soviet Union from the US during World War II. The CME3M (and the CME3ME variant) is an extensive rebuild of another staple of the railways of the Eastern Bloc, the 8000 Czech-built CME3 heavy shunters.

Passenger services

There are currently six fast services a day to and from Vilnius with journey times ranging from just over 4h10 to 4h50 depending on stopping



Above: On the morning of 18 August 2018 LTG TEP70BS 003 awaits departure from Siauliai station with a Klaipėda–Vilnius train. The TEP70BS first emerged in 2002 and is a more advanced variant of the TEP70.

patterns. These services are usually operated by LTG's 3-car Class 730ML DMUs built by PESA in Poland and introduced in 2016. However, loco haulage clings on with the current online LTG timetable showing two trains in each direction on Friday and Sundays only (identifiable on the LTG journey planner as second class only).

Loco-hauled services used to be the domain of the mighty Class TEP70, a Soviet design that had its genesis in the *Kestrel* Type 5 prototype built by Brush in 1967 for British Rail and acquired by the USSR in 1971. These workings are now in the hands of the ER20s, presumably on the grounds of reliability, fuel consumption and greater availability due to the freight downturn. With the suspension of overnight trains to Belarus and Russia these are now the only loco-hauled passenger services in the Baltic States (excluding

the RZD Kaliningrad–Moskva service, which does not pick up or set down outside Russia).

Local passenger services are experiencing a slow revival in Lithuania from their post state communism nadir, with reinstatement of routes and introduction of new trains. Indeed, the new contract between LTG and the Lithuanian government sets a target of significantly increasing passenger numbers. By 2025 passenger traffic must increase to 6 million from the 4.3 million carried between January and November 2022. By 2030 passenger numbers should reach 10 million.

This expansionist agenda manifested itself in the Klaipėda region when a service was reintroduced in 2018 from Klaipėda to the sizeable town of Šilutė, 50 km to the south. Currently, the service runs four times a day



TEP70 0235 blasts up the incline out of Klaipėda station at the start of its journey to Vilnius on 29 July 2017. This view is no longer possible due to the installation of noise barriers on the approaches to the station.





Above: On 16 June 2023 LGT Link 3-car DMU 730ML-002 its begins its journey from Klaipėda to Vilnius. PESA supplied seven of these units to LGT in 2016.

Below: ER20 arrives at Kretinga, the last stop before Klaipėda, with a Vilnius–Klaipėda service on 18 June 2023. This is one of the few remaining loco hauled workings in the Baltic States, most services between the capital and Klaipėda being worked by Class 730ML DMUs.



and during the author's visit in summer 2023 was operated by a single-car PESA-built Class 620M DMU, ambling through the deep rural countryside and stopping at stations and halts, some of which retained the buildings of busier times. The tracks (but not passenger trains) continue beyond Šilutė in the direction of Kaliningrad – from Pagėgiai just north of the border a line heads inland to Šiauliai and Radviliškis. The only other local passenger trains out of Klaipėda are the stopping services that run as far as Radviliškis on the main line to Vilnius.

Electrification and new trains

The rail scene in Klaipėda is set to be transformed by the electrification of the main line to Vilnius representing a new era for one of Europe's least electrified rail networks and the country's most important freight and passenger corridor. The €398 million scheme, which involves electrifying 364 route-km, is already at the halfway stage. Work on the Klaipėda end of the route is due to begin in mid-2024 and the first electric trains are scheduled to start running by the end of 2025. In preparation for this LTG has ordered 15 Stadler FLIRT multiple units (with the option of a further 13). Nine of the initial batch of FLIRTs will be 5-car EMUs, with an intercity specification (including a bistro), and six will be 3-car BEMUs to allow operation on non-electrified lines (TR EU 330 p7). Meanwhile LTG Cargo has recently launched its first ever tender for electric locos (TR EU 331).

For the longer term, Lithuania is also pressing for the EU to prioritise the conversion of the Vilnius–Klaipėda route to standard gauge, which it argues will not only provide a better connection between this key Baltic port and the West but will help ensure that freight movements (including grain) from Ukraine can more easily bypass Russia and Belarus.

Below: Šilutė's substantial station is now host to four daily train pairs to and from Klaipėda. The line continues towards nearby Kaliningrad but since Russia's invasion of Ukraine little freight has passed this way. LGT Link DMU 620Mc022 (built in Poland by PESA) waits to return to Klaipėda on 20 June 2023.



Observing operations

Despite the effects of the war on the port a significant amount of very lengthy heavy freight trains, all observed as being hauled by ER20s in single or multiple, can be seen as well as trip workings which are primarily in the hands of TEM-TMHs and CME3M shunters. For photography a footbridge just north of the station provides a commanding view of the station and yards. A little further on there are good vantage points on the main line to Vilnius in the forest a short walk north from the station, as well as for the access lines to the northern docks complex, which includes the terminals for oil, petroleum and chemicals as well as the terminals for bulk grain and fertilisers. The woods are also close to Klaipėda's town beach (which has a couple of cafes).

Heading further down the main line out of Klaipėda the first local station, Giruliai, gives access to the northern end of the same forest and some good spots for train watching. Giruliai station is only served by two trains a day in each direction but there is a frequent bus service to the city centre. The reinstatement of the Šilutė service also led to the reopening of Rimkai station in the hinterland on the opposite southern edge of the city where there is yet another yard and good vantage points on the through lines. The station can also be easily reached by the city's local bus services as well as the four trains a day in each direction to Šilutė. Klaipėda railway scene will soon be changed forever when the electrification masts reach the city, which will bring with it the end of the era of the dominance of diesel hauled heavy freight clanking its way through the characterful urban and sylvan forest settings of this likeable city.

Non-railway attractions

Klaipėda has a laid-back charm which is enlivened by its role as a port city, suffused by its complex and fascinating history and enhanced by ease of access (by frequent ferry) to the miles of sandy beaches and pristine forests of the Curonian Spit. It is also a good jumping off point for the Nemunas Delta regional park via the Šilutė service.

How to get there

It is a long haul by rail to Klaipėda from the UK, eased slightly by the reintroduction of a rail link between the Lithuanian capital and Poland. Ferries to Kiel and Karlshamn (Sweden) offer other opportunities for avoiding air travel. For those opting to travel by air there are four Ryanair flights a week in the summer (three in the off season) from Stansted to Klaipėda's nearby seaside resort neighbour, Palanga, as well as more frequent flights from the UK to Kaunas and Vilnius.

Right: The handsome Klaipėda narrow gauge terminus of 1905 is located near the broad gauge station. The trains are long gone but the station has been repurposed as a restaurant and bar.



Above: 2-10-0 steam loco L-1160 (BMZ Bryansk 1160, 1949) is plinthed outside the station at Klaipėda.

